

THE CLAIMS

1. A process allowing for a simultaneous functioning of applications on at least two communication and/or supply contact and/or contactless interfaces of an intelligent portable object, the said object implementing transitions of functioning status or variations in functioning status characterised in that it includes:

- a status transitions or variations control step including a step giving information on the status transitions or variations and/or an object configuration step, prior to the operation of a fully simultaneous functioning of applications.

2- A process according to The claim 1, characterised in that the control is performed by a resource controller and/or the processor block and/or one of the applications.

3- A process according to the claims 1 and 2, characterised in that the phase forming supply controller detects the appearance and/or the disappearance of resources, for example in real time.

4- A process according to the claim 3, characterised in the phase forming supply controller generates one interruption to an interruption controller, in case of a variation in availability of at least one resource.

5- A process according to the claims 3 and 4, characterised in that the supply controller phase is capable of generating, or not, an interruption in the course of transitions from one status to another, more particularly in case of:

- transition (13.17; 14.18) from a state of low consumption to supply via the contactless interface (3): the interruption occurs if the voltage via this interface (3) is higher than the threshold voltage;

- transition (17.13 ; 18.14) from supply via the contactless interface to the cessation of this supply: the interruption occurs when the voltage received by the contactless interface (3) is lower than the threshold voltage;

- transition (15.16) from supply via the contactless interface to supply via the contact interface (7); the interruption occurs; and

- Transition (16.16) or reset sequence (MaZ) commanded by the contact interface (7), with supply via the contact interface 7. the interruption occurs.

6- A process according to The claim 5, characterised in that, during transition (17.13 ; 18.14) from supply via the contactless interface (3) to the
5 cessation of this supply: the interruption occurs when the voltage received by the contactless interface (3) is lower than a threshold voltage; in the wake, the chip (6) is placed in sleep.

7- A process according to The claims 5 or 6, characterised in that the value of the critical threshold voltage is predetermined in such a way as to
10 allow risk-free transfer of complete cessation of the supply of the chip (6); for example, the value of this threshold voltage is slightly higher than a minimum voltage for operation of the chip (6).

8- A process according to one of the claims 1 to 7, characterised in that this process comprises at least one step of immediate warning for fully
15 simultaneous management of power and/or clock resources (VCC; VDD; CLK).

9- A process according to one of the claims 1 to 8, characterised in that this process makes provision for at least one step of transaction maintenance, with at least one phase of delaying and/or simulation of resetting, ordered by the contact interface (7) during a transition aiming to reinitialise (MaZ) the chip
20 (6) during a change in course of the resources.

10- A process according to claim 9, characterised in that a delay phase, during which the execution of instructions derived from the code selected generates, for example, a delay command by sending a single usual command byte of response ("ATR") to activation of reset.

25 11- A process according to one of the claims 1 to 10, characterised in that this process makes provision for at least one logical phase forming a sleep controller so that the chip (6) complies with constraints of lower consumption during sleep states (13; 14; 17; 18).

30 12- A fully simultaneous information device for variations in status, for an intelligent portable object (1) having at least a dual interface and being provided with a chip (6); this object (1) being capable of communicating with at

least one electronic data transmission terminal (2) via a contact and/or contactless interface (7); this device being such that: the terminal (2) is connected to the object (1) via the contact interface (7) so as to be secured by the object (1) in a dual interface operation status (16), with the contact
5 interface (7) and contactless interface (3) functioning at the same time; at least one transition causing a variation in at least one status for the object (1);

characterised in that the device includes at least chip (6) information means which are capable of restituting status variations, with at least one supply controller functional block (107) which ensures
10 configuration/information, thus allowing for a fully simultaneous functioning, using a contact interface (7) and/or a contactless interface (3).

13- A device according to the claim 12, characterised in that the said device includes means (103) of immunity comprising at least the functional block (107) forming supply controller, which detects the appearance and/or the
15 disappearance of resources.

14- A device according to the claim 13, characterised in the means (103) of immunity comprise means for the fully simultaneous management of power and/or clock and/or delay resources (VCC; VDD; CLK).

15 – A device according to one of the claims 12 to 14, characterised in
20 that it comprises means (102) of immediate warning, for fully simultaneous management of power and/or clock resources (VCC; VDD; CLK).

16- A device according to one of the claims 12 to 15, characterised in that this device makes provision for at least one step of transaction maintenance, with at least one phase of delaying and/or simulation of resetting,
25 ordered by the contact interface (7) during a transition aiming to reinitialise (MaZ) the chip (6) during a change in course of the resources.

17- A device according to the claim 16, characterised in that: this functional block (107) comprises wiring or similar for supply of the chip (6) with appropriate voltage and power, for information of this chip (6) of the
30 appearance and/or disappearance of supply resources derived from the contact interface (7) and/or contactless interface (3).

18- A device according to the claims 16 or 17, characterised in that: -
this device comprises a functional block (106) forming a sleep controller, for
conformation of the chip to constraints of low consumption during sleep states
(13 ; 14 ; 17 ; 18).